

## **Magneto-Optical Switching Backplane for Microprocessor Interconnection**

### ABSTRACT OF THE INVENTION

A system and method are disclosed for an optical backplane in an electronic processor that comprises of a plurality of processing units. The backplane is comprising of a network of optical waveguides which can guide polarized light. Furthermore, the backplane has magneto optic routers for steering light at the vertexes of the network, and the backplane also has optical devices for operationally connecting the processing units to the network. The backplane network affords an optical interconnection amongst all of the processing units.